

Yarra Strategic Plan

Melbourne Water

Identifying key gaps and opportunities for future protection of areas of high environmental and landscape value

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00	16/05/18	Draft report provided to Melbourne Water	B.Hatt	S.Treadwell	S.Treadwell
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Document history and status



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Appendix A. Summary of partner document review



Important note about your report

The sole purpose of this report and the associated services performance by Jacobs is to identify areas of high environmental and landscape value, habitat corridors and urban forest within the Yarra River corridor that are not currently protected by any planning controls. That scope of services, as described in this report, was developed with Melbourne Water.

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1. Introduction

Melbourne Water is leading the development of the Yarra Strategic Plan (YSP) which will give effect to the community's long-term vision for the Yarra and provided the basis for the future planning of the river corridor and each of its reaches. This is in response to the Yarra River Protection (Willip-gin Birrarung Murron) Act 2017, which was introduced to the Victorian Parliament to protect the Yarra River for future generations. An important consideration for the development of the YSP are the current and future planning controls that relate to protection of values along the Yarra River corridor as well as mitigation of threats to those values.

1.1 Scope of this study

Jacobs was engaged by Melbourne Water to support the development of the YSP by identifying key gaps in planning controls and opportunities for future protection. The particular objectives were to:

- 1. Map the current planning controls to identify areas that contain values but are not currently under any form of protection;
- 2. Review current state, zoning, maps and future plans obtained from YSP project partners to identify areas where future planning controls are in development; and
- 3. Liaise with Councils adjacent to the Yarra River to gain future information regarding priorities, challenges and gaps in planning controls.

YSP project partners include Councils adjacent to the Yarra River, the Port Phillip Catchment Management Authority, Parks Victoria and the Department of Environment, Land, Water and Planning (DELWP).

This document reports the outcomes of Objectives 2 & 3. Objective 1 was delivered as a component of a separate but related project – the development of the Yarra Strategic Plan Values and Threats Spatial Database.



2. Approach

2.1 Review of YSP partner documents

Forty documents that outline strategies for managing various aspects (e.g. social, environmental, planning, economic) of regions along the Yarra River were provided to Jacobs for review (Table 1). They have been published by Councils and other government agencies that have an interest in or whose jurisdiction abuts the Yarra River. These entities are: Banyule City Council, City of Boroondara, City of Hobsons Bay, City of Melbourne, City of Stonnington, City of Yarra, Manningham City Council, Nillumbik Shire Council, Yarra Ranges Council, the Department of Environment, Land, Water & Planning (DELWP) and Parks Victoria.

Table 1. YSP partner documents included in review.

ID	Document name	Responsible agency	Year
1	Boroondara Urban Biodiversity Strategy	City of Boroondara	2013
2	Banyule Planet: The Biodiversity Plan 2014-2017	Banyule City Council	2014
3	Protecting Victoria's Environment - Biodiversity 2037	DELWP	2017
4	Urban Biodiversity Implementation Plan 2017-2020	City of Boroondara	2017
5	Urban Ecology and Biodiversity Strategy	City of Melbourne	2016
6	Hobsons Bay Draft Biodiversity Strategy 2017-22	City of Hobsons Bay	2017
7	Nillumbik Biodiversity Strategy 2012	Nillumbik Shire Council	2012
8	Sustainable Environment Strategy 2013-2017	City of Stonnington	2013
9	Draft Urban Forest Strategy	City of Stonnington	2017
10	Draft Council Plan 2017-2021	City of Stonnington	2017
11	Yarra River Corridor Strategy Vol.1 & 2. (numerous documents)	City of Yarra	2015
12	Yarra Valley, Yarra And Dandenong Ranges Green Wedge Management Plan	Yarra Ranges Council	2010
13	Plan Melbourne 2017-2050	DELWP	2017
14	Boroondara Open Space Strategy	City of Boroondara	2013
15	Yarra Open Space Strategy	City of Yarra	2006
16	Yarra Environmental Strategy 2013-17	City of Yarra	2013
17	Nillumbik Green Wedge Management Plan (Volume 1 and 2)	Nillumbik Shire Council	2010
18	Yarra Ranges National Park Management Plan	Parks Victoria	2002
19	Yarra Valley Parklands Management Plan	Parks Victoria	2008
20	Dandenong Ranges National Park	Parks Victoria	2006
21	Warrandyte State Park Management Plan	Parks Victoria	2006
22	Linking people and spaces	Parks Victoria	2002
23	Manningham Green Wedge Management Plan	Manningham Council	2011
24	Boroondara Integrated Water Management Strategy	City of Boroondara	2014
25	Yarra Ranges Council Environment Strategy 2015-2025	Yarra Ranges Council	2015
26	Flora & Fauna Plan	Yarra Ranges Council	2012
27	YRC ROSS 2013-2023 Implementation	Yarra Ranges Council	2013
28	Manningham City Council Open Space Strategy (Part 1 and 2	Manningham Council	2014
29	Nillumbik Integrated Water Management Strategy	Nillumbik Shire Council	2013



30	City of Yarra Water Action Plan	City of Yarra	2006
31	Victorian Waterway Management Strategy (Part 2)	DELWP	2013
32	Lower Yarra River Future Directions Plan and Recreation Guidelines	Parks Victoria	2001
33	Middle Yarra Corridor Study (Ivanhoe to Warrandyte)-numerous docs		2016
34	Lower Yarra River Corridor Study (Richmond to Fairfield) - numerous docs		2016
35	Water for Victoria	DELWP	2016
36	Council Plan 2017-2021	Banyule City Council	2017
37	YRC Recreation and Open Space Plan (ROSP) Strategic Framework 2013-2023	Yarra Ranges Council	2013
38	Victoria Planning Provisions (VPPs) All Clauses	DELWP	2017
39	Maribyrnong and Yarra Rivers: Draft Water and Land Access Plan	Parks Victoria	2007
40	Yarra Bend Park Trails Strategy Master Plan	Parks Victoria	2001

2.2 Council liaisons

Councils whose boundaries intersect with the Yarra River are as follows:

- City of Melbourne
- City of Stonnington
- City of Yarra
- City of Boroondara
- Manningham City Council
- Banyule City Council
- Yarra Ranges Council
- Nillumbik Shire Council

Meetings were held with representatives from six of the eight Councils, most of whom were strategic planners. Unfortunately, despite several attempts to make contact, we were unsuccessful in booking meetings with representatives from the City of Melbourne and Yarra Ranges Council. Prior to our telephone meetings, the Council staff were provided with an overview of the project and the purpose of the meetings to help guide the discussion. A simple web interface was developed to efficiently facilitate the Council discussions and map the information gathered during those discussions – the Envision Planning Controls Review app. Council staff were also provided with login details to enable them to add information.



3. Results

3.1 Review of YSP partner documents

3.1.1 Common findings

Most documents were written at a high level and generally did not identify specific actions, locations of interest, etc. However, a number of common values and threats were identified and these are listed below, together with actions where these were specifically mentioned:

Value: Yarra River and its tributaries

- Improve the environmental condition of all waterways and use them as biodiversity corridors (many connect to the Yarra River)
 - Educating community and engaging community groups
 - Protect and/or improve vegetation along Yarra River
 - Community groups, Council efforts, school programs
- Reduce runoff entering the Yarra River
 - Water Sensitive Urban Design (WSUD) / Integrated Water Management (IWM)

Value: Biodiversity/open space

- Improve connectivity between biodiversity sites, parks and nature corridors (either connect or create biodiversity paths)
 - Vegetating schools as well as private and public land to provide links for biodiversity corridors
 - Acknowledged the need to acquire land to connect nature corridors in some cases
- Connect community with nature through educational programs and community engagement
 - o Incentives
 - o Educational
 - o Improve wellbeing of public

Value: Urban forestry

- Maintain/improve landscape with indigenous vegetation
- Account for climate change in long-term plans

Value: Cultural heritage

- Identify and protect Aboriginal cultural sites
- Accommodate respect for European cultural history within revegetation activities (more so for inner urban areas)

Threat: Protection from development

- Tree removal as a consequence of development and potential disruption to biodiversity corridors, including waterway corridors
- Follow current planning schemes
 - Apply for amendments enforce WSUD features, etc.
- Balance the competing demands of maintaining residential amenity and population growth through appropriate planning

Threat: Climate change

- Impact of extreme weather events on
 - $\circ \quad \text{Plants and animals} \quad$
 - $\circ \quad \text{Flows in waterways} \quad$
 - o Private and community parks, gardens and streetscapes; and
 - o Provision and maintenance of infrastructure to accommodate resident needs and aspirations



3.1.2 Most useful documents

The following documents are directly related to the Yarra River and each contain high level details and analysis of values, threats and planning controls along its corridor:

- Yarra River Corridor Strategy Volumes 1 & 2 {Item 11 in Table 1, \City of Yarra, 2015 #1617}
- Middle Yarra Corridor Study {Item 33 in Table 1, \DELWP, 2016 #1618}
- Lower Yarra Corridor Study {Item 34 in Table 1, \DELWP, 2016 #1619}

These Lower and Middle Yarra Corridor Studies, in particular, contain detailed information on the geographical context, topography, environment & biodiversity, character & amenity, cultural heritage and social aspects of the Yarra River. The content of each of these documents is categorised and summarised by several factors in Table 2 through to Table 4. A summary of the remaining documents listed in Table 1 can be found in Appendix A.

Factor	Key excerpts and recommendations
Value	ENVIRONMENTAL, CHARACTER & AMENITY
	Substantial built form setbacks from the river corridor which allow vegetation to screen built form
	Naturalistic river edge
	Highly vegetated
	TOURISM & RECREATION
	Sculpture trail along the river frontage
Protection from development	The recent changes to State policy and the Boroondara Planning Scheme (VC96), instigated by the Planning Minister (October 2012), have changed the context for Yarra River planning policy and controls. The VC96 planning scheme amendment introduced mandatory height controls within the City of Boroondara and State policy for river corridors. State and local government agencies are investigating stronger Planning Scheme provisions in the Middle Yarra (from Darebin Creek confluence to Warrandyte).
	Upgrading of the built form controls along the City of Yarra's section of the Yarra River through the amended schedule 1 to the Design and Development Overlay (DDO1).
	Recommendations for stronger setback and height provisions were released in a report – Middle Yarra River Corridor Study – Draft Recommendations Report – July 2014.
	Stronger controls are required to protect the river banks and the vegetated buffer corridor along the river. Mandatory ground level setbacks and building heights along the river frontage are recommended to address this issue. This recommendation is in keeping with the approach taken in Amendment VC96 and Plan Melbourne (May 2014) which encourages the use of stronger controls along the Yarra River for protection against inappropriate development. It is also consistent with the DSE 2005 report (e.g. for Leafy Suburban) and the MSS which states: prescribing maximum building heights and setbacks is necessary for some sections of the Corridor.
	The key policies and controls that currently apply to the Yarra River in the City of Yarra found in the Yarra Planning Scheme are:
	Clause 11.04-8 River Corridors (SPPF)
	Clause 21.05-3 Built Form Character - Yarra River Corridor (MSS)
	Clause 21.07-2 Yarra River, Merri Creek & Darebin Creek (MSS)
	Residential, commercial and industrial zones
	 Design & Development Overlay for the majority of the river environs (DDO1) & Victoria St East precinct river environs (DDO4 – expired 30/9/11)
	Land Subject to Inundation Overlay (LSIO)

Table 2. Summary of Yarra River Corridor Strategy Volumes 1 & 2 (City of Yarra 2015)



	Environmental Significance Overlay for the Yarra River environs (ESO1)
	The zones, DDO, LSIO and ESO trigger permits for most types of development and certain uses along the Yarra River. DDO1, DDO4 and ESO1 apply specifically to the Yarra River corridor and include objectives and guidelines. DDO1 includes discretionary building setback and height limits.
	The related creek corridors are also covered by DDO1 which applies to all three waterways. ESO2 applies to the 'Merri Creek and Environs' and ESO3 applies to the 'Darebin Creek and Environs'.
	Key controls that apply on the opposite banks of the Yarra River are:
	 Stonnington LSIO, DDO31 & Significant Landscape Overlay (SLO) SLO1 Boroondara LSIO, DDO & ESO
	Key controls that apply to discrete areas along the City of Yarra's Yarra River corridor are:
	Comprehensive Development Zone at Victoria Gardens (CDZ1) & Richmond Maltings Site
	(CDZ3)
	Priority Development Zone at Yarra Gardens / Shamrock Street North (PDZ1)
	 Special Use Zone at Latrobe Golf Course (SUZ1) and at Abbotsford Convent (SUZ4) Urban Floodway Zone (UFZ) at View Street, Alphington
	 Urban Floodway Zone (UFZ) at View Street, Alphington Development Plan Overlay at 572-576 Swan St (DPO3) and at the Amcor site (DPO11)
	 Development Plan Overlay at 572-576 Swan St (DPOS) and at the Amoor Site (DPOTT) Public Acquisition Overlay (PAO2) along two main waterway sections
	 Special Building Overlay (SBO) at a small area of residential land in Alphington
	 Heritage Overlay (HO) at various sites
	The CDZ, PDZ and DPO include discretionary and mandatory building height, setbacks and river
	access requirements as well as design guidelines.
Issue/areas for improvement	Recent development within the corridor has not adhered to the existing height and setback controls set out in the planning scheme. Built form has encroached closer to the river and exceeded discretionary height limits. In some cases, recent development has been located up to, and beyond, the crestline on the river bank. The siting of built form close to the river's edge is a significant issue. Threats to the river corridor's character and values are greatest in these areas because development has the most impact on the river and its banks.
	Backyard subdivision along the Yarra River frontage is a pressing issue in the residential areas of nearby municipalities and has already taken place in the Leafy Suburban character type. Other types of development that are an issue in this character type are tennis courts, swimming pools, fencing and stairs along the river frontage. This development threatens to disturb vegetation, including remnant vegetation, and the river bank along the river corridor. Loss of vegetation to such development is also likely to adversely impact on water quality, bank stabilisation and the secluded feel of the area.
	Land in the Current and Ex-Industrial type is under particular pressure for redevelopment, especially around the Victoria Street Major Activity Centre (MAC). It has been experiencing the most intense development pressure from buildings, particularly in terms of excessive heights and insufficient setbacks. The key impacts of this are loss of amenity and landscape and environmental values.
	Since the expiry of interim DDO4 which applied to the Yarra River corridor in Victoria Street East Precinct, however, discretionary controls encouraging built form setbacks and restricting heights and built form guidelines have been lacking for this key section of the river.
	While visible development is expected within this city context, and the existing heritage buildings are valued from an aesthetic point of view (in some cases), it is important to protect the river and banks from being dominated by encroaching built form.
	The motorway edge in Cremorne and Burnley has effectively destroyed any possibility of creating a peaceful riverine landscape, but it is possible to envisage a substantial improvement to the built form that flanks CityLink / Monash Freeway. The current planning scheme policy and provisions provide for this but this could be improved to provide more emphasis providing views between the buildings along the built form edge.
	Further work should be undertaken to review policy and controls for the Victoria Street Activity Centre precincts, particularly the land located away from the river, the removed DDO4 and the



	local policy at Clause 22.11 for the Victoria Street East Precinct Policy.
	DAREBIN & MERRI CREEK This project focuses on the Yarra River, further work should be undertaken to review controls along the Darebin and Merri Creek corridors, particularly in terms of the DDO1 boundary.
	REVIEW OF SITE-SPECIFIC CONTROLS In order to avoid conflict with detailed site specific controls and unnecessary duplication, the DDO should be removed from the following areas and further work considered to revise these controls to be consistent with this strategy:
	Forensicare (subject to PUZ schedule)
	 Abbotsford Convent (subject to SUZ4 and an incorporated Master Plan)
	Botanicca (subject to DPO3)
	Amcor site (subject to DPO11)
	DETAILED SITE & AREA PLANS As recommended in the DSE 2005 report, more detailed design and development planning should be undertaken to provide guidance for any substantial redevelopment in the future at the Carlton and United Breweries (CUB) site and at Victoria Crescent, Abbotsford between Gipps Street and Church Street.
	This is still warranted because of the potential for redevelopment and their proximity to the river. Detailed controls at the CUB site should require public access through the site via an extension of neighbouring streets through to the river, as well as increased river setbacks, riverside public open space, and reduced heights, if and when redevelopment occurs.
	THREATS
	 Subdivision and more intense development adjacent to the river corridor
	Vegetation removal
	 Loss of well-vegetated informal gardens which screen built form from the river corridor
	Immodest and excessive boating infrastructure
	 Fencing and other infrastructure (e.g. stairs) along the river edge
	Backyard tennis courts, swimming pools and other built form that reduces space for planting and impacts on the naturalistic landform
Strategies, plans, etc. for those values	• Maintain and enhance the natural landscape character of the Yarra River Corridor, in which the topography of the river and its banks, and a naturalistic corridor of canopy trees, are the dominant features in public views of the river and its setting.
	• Create a new, high quality and visually permeable built form edge to the motorway and river along the northern flank of CityLink in Cremorne and Richmond.
	 Maintain the sense of seclusion the Yarra River Corridor provides, particularly around Collingwood Children's Farm and upstream of Johnston Street.
	 Minimise the visual intrusion of buildings and works, when viewed from major roads, paths, bridge crossings, public open space, the Main Yarra Trail and the Yarra River itself.
	 Ensure the siting and design of buildings is of a high architectural standard, with all elevations, external colours and finishes demonstrating a positive interface with the Yarra River and its natural landscape and environmental character.
	• Minimise visual bulk impact and allow views to the Yarra River and its vegetated corridor by providing spacing between buildings.
	 Set back development from the river edge to protect the landscape, topography and vegetation of the riverine environment as dominant visual elements.
	 Ensure all buildings, particularly on visible hill slopes, skylines and ridgelines, are subordinate to existing vegetation.
	 Ensure public views of any buildings and works are filtered through existing vegetation and trees.
	 Avoid visually dominant, sheer and unarticulated building elevations and materials that contrast with the surrounding landscape character.



•	Ensure built form does not overshadow public open spaces, the Yarra River and the Main Yarra Trail.
•	Avoid buildings and works, including fences, jetties, boat moorings, within 30 metres from the Yarra River edge to protect existing riparian vegetation.
•	Maintain access to sunlight in public spaces.
•	Ensure development provides passive surveillance of public areas.
•	Ensure lighting is designed to minimise light spill on public open space, the Main Yarra Trail and the Yarra River itself.
	The use of a DDO and an ESO, as currently exists along the river frontage, is still considered to be appropriate for the Yarra River corridor in the City of Yarra. This reflects the findings of the DSE 2005 Report. It also considered the appropriate overlay controls for the area and resolved hat the ESO and DDO should be retained.
	The existing DDO and ESO should be updated and strengthened to protect and enhance the character and values of the river corridor.

Table 3. Summary of Middle Yarra Corridor Study: Recommendations Report (DELWP 2016b)

Factor	Key excerpts and recommendations
Value	There were many aspects of the river corridor in which submitters valued. In particular, these included:
	The special river corridor ambiance and aesthetic
	Its role as a refuge for indigenous plants and animals
	The open space and recreation areas along the corridor
	Native trees and animals.
	Waterways make a significant contribution to Melbourne's landscape and liveability. Melbourne's two main rivers are the Yarra and the Maribyrnong. The Victorian Government is committed to protecting both the Yarra and Maribyrnong Rivers from inappropriate development and safeguarding public access.
	DELWP commissioned this study of the Middle Yarra River corridor to better understand and assess the need for new or amended planning controls and design guidelines for land in proximity to the Yarra River between Burke Road and Warrandyte.
	The objective of this study is to achieve consistent development outcomes along the Middle Yarra River to ensure that further development does not encroach on the river's landscape, environmental, aesthetic, cultural and recreational values. Importantly, the study focusses on management of the interface between public and private land along the corridor.
	The Middle Yarra River Corridor Study is being prepared in partnership with Banyule City Council, Manningham City Council, Shire of Nillumbik and Melbourne Water. A range of stakeholders, including local community groups, have been consulted in the development of the study to better understand the river's values and the preferred outcomes for this landscape.
Protection from	The following planning controls are recommended to be applied within the Middle Yarra Corridor:
development	• Council to consider updating the Municipal Strategic Statement (MSS) to include the content and outcomes of this study as part of a future review of the Local Planning Policy Framework.
	• Apply the Design and Development Overlay (DDO) to private land adjacent to, or within close proximity to, the Yarra River, establishing mandatory building heights and setbacks from the river's edge, as well as other detailed discretionary design requirements.
	• Apply the Significant Landscape Overlay (SLO) to land adjoining the river, to capture an area approximate to the recommended area of management, establishing consistent landscape, vegetation and other management requirements.



	 Include a requirement within the proposed DDO or SLO for Melbourne Water to be the 'Recommending referral authority' for limited classes of development applications within a prescribed distance of the Yarra River.
	 Consider the application of the Incorporated Plan Overlay (IPO) or the Development Plan Overlay (DPO) to public land or major development sites, requiring the completion of a master plan prior to approving new development.
	CONTROL GAPS
	The different ESO and SLO controls across the three council areas of the Middle Yarra (Banyule, Nillumbik, and Manningham) present a varying set of objectives, permit triggers and decision guidelines. This has the potential to lead to inconsistent outcomes within the corridor. Consistent planning controls are required across the corridor to achieve a holistic approach to managing development within the river's landscape, as envisaged by this study.
	The Middle Yarra River corridor (unlike the lower Yarra River corridor between Richmond and Fairfield), has no 'Yarra River' specific Design and Development Overlay controls managing the siting and design of development within close proximity to the river.
	As Melbourne continues to grow, increasing development pressure will be placed on land within the Middle Yarra River corridor. This study recommends stronger built form controls be applied now, to avert the potential for inappropriate development to occur in the future.
	ESO or SLO
	The question of which is the most appropriate planning scheme tool - the Significant Landscape Overlay (SLO) or the Environmental Significance Overlay (ESO) - has been a point of discussion for some time. The primary purpose of applying either overlay control relates to the need to protect the appearance of the landscape and maintain its environmental integrity, both of which have vegetation management as their focus.
	Planning Practice Note No.7 'Vegetation Protection in Urban Areas' provides some direction on the application of both the ESO and the SLO. Practice Note No.7 suggests the application of the ESO and SLO within the following circumstances related to vegetation protection:
	• Where there are environmental constraints on development, or where other important ecological values are identified such as coastal or riparian habitat, the use of an ESO may be appropriate. This overlay is usually applied if vegetation protection is part of a wider objective to protect the environmental significance of an area.
	• The ESO may contain requirements for the construction of buildings and the carrying out of works as well as fence construction. It can also include requirements for subdivision and exemptions for the removal of vegetation.
	• Where there is a need to identify, conserve and enhance the character of significant landscapes, the SLO may be used to protect vegetation in terms of its aesthetic or visual importance in the broader landscape and where vegetation is identified as an important contributor to the character of an area.
	• The SLO may contain requirements for the construction of buildings and the carrying out of works as well as fence construction. A schedule must specify a permit requirement for the removal of vegetation.
Strategies, plans, etc. for those values	There was strong support for improved management and protection of the Middle Yarra River corridor and a number of detailed submissions outlined ways in which protection could be enhanced, including:
	Stricter controls for the protection of native vegetation and animals
	Further revegetation work
	Better management
	Increased funding for the Middle Yarra River corridor
	Implementation of built form development guidelines
	Improved planning controls.



Factor	Key excerpts and recommendations
Value	 The Yarra River and its corridor is recognised in State policy as a significant open space, recreation, aesthetic, conservation and tourism asset for Metropolitan Melbourne. Its significance is linked to a wide range of values, which can be grouped under the following themes: Geographical Context Topography Environment & Biodiversity Character & Amenity Cultural Heritage Open Space, Recreation & Access The Lower Yarra includes three of the river's major tributaries: the lower reaches of the Merri Creek, which enters the Yarra near Dights Falls; Darebin Creek, which enters the Yarra near the Latrobe Golf Course; and Gardiners Creek, which enters near to the crossing the Monash Freeway over the Yarra River. The Lower Yarra River corridor falls within the South Eastern Highlands (SEH) –Highlands-Southern Fall, Southern Volcanic Plain (SVP) Victorian Volcanic Plain (VVP) and South East Coastal Plain (SCP) – Gippsland Plain bioregions. The dominant ecological vegetation classes include Floodplain Riparian Woodland and Riparian Woodland, which run along the Yarra River are dominated by Plains Grassy Woodland, Escarpment Scrubland, Escarpment Woodland, and Box Ironbark Forest. Over 240 flora and fauna species have been recorded within the Lower Yarra River corridor, including some registered under international agreements and some listed under the Flora and Fauna Guarantee Act3. This equates to approximately 1/10 of the State's total number of identified flora species. Yarra Bend Park is an important indicator of the study area's underlying ecology and is listed on the Register of the National Estate in recognition of its outstanding ecological values. However, a large proportion of the study area contains vegetation classes classified as endangered or vulnerable. While remnant riparian plant communities are adapted to respond to natural disruptions from flooding and erosion, ongoing effort is required to balance destruc
	from the surrounding city, including invasions of weeds, litter, urban development, and wear from recreational activities.
Protection from	The following planning controls are recommended to be applied within the Lower Yarra Corridor:
development	 Council to consider updating the Municipal Strategic Statement (MSS) to include the conten and outcomes of this study as part of a future review of the Local Planning Policy Framework.
	• Apply the Design and Development Overlay (DDO) to private land adjacent to, or within close proximity to, the Yarra River, establishing mandatory building heights and setbacks from the river's edge, as well as other detailed discretionary design requirements.
	• Apply the Significant Landscape Overlay (SLO) to land adjoining the river, to capture an area approximate to the recommended area of management, establishing consistent landscape, vegetation and other management requirements.
	• Include a requirement within the proposed DDO or SLO for Melbourne Water to be the 'Recommending referral authority' for limited classes of development applications within a prescribed distance of the Yarra River.
	• Consider the application of the Incorporated Plan Overlay (IPO) or the Development Plan Overlay (DPO) to public land or major development sites, requiring the completion of a master plan prior to approving new development.
Issue/areas for	Threats to Built Form Character
improvement	• Built form that is highly visible along the ridgeline/skyline and surrounding hillslopes, as viewed from the Yarra River corridor and areas of public open space
	Bulky, heavily massed buildings
	Bold, bright colours and reflective finishes on buildings
	 Large surface areas of white/off-white/light shades of colour

Table 4. Summary of Lower Yarra Corridor Study: Recommendations Report (DELWP 2016a)



Built form that is not substantially screened by vegetation
Built form that does not respect the preferred building height for the area
Built form that does not respect the heritage values of the local area
Built form that is on and too close to the banks of the Yarra River
High, solid fencing or gates
Signage that is out of scale or character with the landscape.
Threats to Landscape Character
Removal of significant indigenous vegetation
Loss of mature vegetation and canopy trees
Lack of vegetation/ landscaping
Built form that penetrates the predominant tree canopy height
Excessive disturbance to existing topography caused by cut and fill
Large areas of hard paved surfaces, including driveways and car parking areas
Proliferation of weeds.
Other Threats A number of other threats are relevant to the study area, but are more appropriately addressed at a whole of catchment level or through another policy mechanism, and as such are not addressed in detail in this report. These threats include issues relating to water quality, flooding, erosion, vegetation protection and management, litter, and control of environmental weeds and pests.

3.1.3 Planning controls

Council planning controls present a varying set of objectives, permit triggers and decision guidelines. The potential for this to lead to inconsistent outcomes, together with the need for stronger, consistent controls to protect the river banks and the vegetated buffer corridor along the river from inappropriate development, was generally acknowledged. However, there is currently no consensus on which are the most appropriate planning controls to provide strength and consistency. The Middle Yarra Corridor Study (DELWP 2016b) suggests using a DDO in combination with an ESO or SLO and provides some guidance on when to use each of the latter two controls. Recent changes to the State Planning Policy Framework (SPPF) set clear objectives for preventing overshadowing, limiting building height, increasing setbacks, and riparian and canopy vegetation protection in the Yarra River corridor (DELWP 2016c). The expectation is that these standards will be applied through new DDOs and SLOs in local planning schemes with the view to support more consistent decision-making along the Yarra River corridor. Interestingly, it has previously been postulated that increased State government intervention in planning decisions may undermine community confidence in the planning system (Manningham City Council 2011). Whether this concern is broadly representative of local governments or resolved by the more recent changes to the SPPF is uncertain.

3.2 Council discussions

The main outcomes of the Council discussions are summarised in Table 5. It should be noted that it is not entirely certain whether the views expressed by the Council staff were based on individual preferences, knowledge and experience or more broadly representative of Council. In general, and consistent with the findings of the YSP partner document review, Councils identified similar values and threats to those values:

- Values: the Yarra river and its tributaries, parklands, wetlands, vegetation, biodiversity corridors, cycling and walking paths
- Threats: expanding urban development, urban densification, inappropriate urban development, stormwater, wastewater, farm dams

Identifying key gaps and opportunities for future protection of areas of high environmental and landscape value



The priority values differed between Councils and, not surprisingly, followed the urban gradient. Inner city Councils with fewer natural waterways were more concerned with public open space, urban forests and increasing urban development, Nillumbik Shire Council's goals were a mix of environmental and social across both the urban and rural context and the priorities of the middle suburban Councils fell somewhere in between. Vegetation, biodiversity, social values and the challenge of increasing urbanisation were consistently the strongest themes. It also was noted that the complexity of Council planning controls increased with urban density.

Despite identifying similar goals, the planning controls implemented to achieve those goals varied from Council to Council (see Table 5). In most cases, the reasons for these differences (e.g. preferences of the planning team, historical precedent at the organisational level) was not clear. There were some areas within the Yarra River corridor that were not covered by any form of planning control; where these gaps were identified, they have been noted in the accompanying Envision web interface, together with any location-specific values, threats and projects that were identified during Council discussions. The Envision Planning Controls Review app can be accessed as follows:

Link: ArcGIS Web Application

Username: IS236700_MW

Password: yspgis023



Table 5. Summary of discussions with representatives of Councils whose municipalities are located along the Yarra River

Council	Banyule City Council	Manningham City Council	City of Yarra	City of Stonnington	City of Boroondara	Nillumbik Shire Council
Projects	 Projects or capital works to manage development Council interested in: Banyule Flats and parklands – rare migratory birds at Banyule flats. Diversion of water from the river. 		 Proposed Abbotsford Structure Plan - dealing with land between Victoria Street and Digits Falls Abbotsford to improve access Redevelopment of the CUB complex - associated opportunities to gain public access and improve amenity (near Dickenson's reserve) Potential new shared path bridge to allow access for people south of the river to open space to the north Future of the Golf Course and the potential for public access to the river and across the river N-S Developing a biodiversity strategy Finalising an urban forestry strategy 	 Current: Yarra River Project focuses on Biodiversity, in particular Indigenous riparian vegetation Construction of ephemeral wetlands (currently at Stage 1 of development) Pedestrian bridge Removal of invasive vegetation (stage 6 of completion) along the Yarra River. Implement a 3-metre-wide shared path bike (not sure where about this is located). Potential: Grange Rd bridge (has no bike path) Gardiners Creek trail 	 Wetland project, near Chandler highway (completed) Bridge doubling project going on at the Chandler Highway, and this could impact the Yarra River. Waterway health addressed in IWM strategy Typically Council-owned projects Mainly installed in parks Focus on suspended solids 	Potential road sealing and sewerage backlog projects Farm dams (see Issues for further details)
Planning controls	Use VPO, SBO1 and SBO 2 Overlays ESO1 DDO's MW SBO > 60 ha - SBO1 Banyule < 60 ha (SBO2)	 ESO1 'Yarra River Environs' Amendment C54 Holistic review of ESO, VPO and SLO Removed most VPO Yarra was covered by ESO Retained GC48 – Yarra controls reviews and replaced by SLOP Comprehensive environmental coverage based on bio sites report – residential zones for incremental change RZ1 GRZ2 (min lot size) RGZ2 (height controls) DD08 Aesthetics Environmental 	 Design and Development Overlay (DDO1) 'Yarra River Corridor Protection', inclusive of Merri & Darebin Creeks Important because is the only control that specifically manages built form Part of the new riverside controls that gives the mandatory height and set back controls Important from Yarra point of view as there is a lot of development pressure and so the DDO is the only overlay that mandates this SBO amendment ESD in Yarra planning scheme which includes requirements relating to stormwater and stormwater management Environmental Significance Overlay (ESO1) 'Yarra River Environs' 	 All planning controls along the Yarra are related to the DOO that the minister introduced C50 - SLO - 200 along Grange Road and Toorak. DDO 6 - covers Yarra link DDO 3A and DDO 3C - introduced by the minister for planning, controls for construction along the Yarra DDO - Royal botanical gardens Design and Development Overlay (DDO3) 'Yarra River Skyline Area' Significant Landscape Overlay (SLO1) 'Yarra River and Valley Streamside Environment Area' 	 VPO is not used along the Yarra River in Boroondara. DDO31 Residential development control that influences the construction of houses on the banks of the Yarra The primary planning control that protects the Yarra River Covers all small lots (one to two dwellings) Set back from the river and maximum height controls Lot coverage SLO Removal of or planning vegetation Rules around changing land that slopes into a series of steps 	All planning controls are those imposed by the State government ESO2 'Yarra River Environs' SLO15 is the Yarra River environs overlay recently introduced by State Government. ESO1 is the result of biodiversity work undertaken as part of the NEROC study some 20 years ago (1997) – but related to faunal and habitat value. There is currently not much scope for rezoning - development is based on planning permits.



Council	Banyule City Council	Manningham City Council	City of Yarra	City of Stonnington	City of Boroondara	Nillumbik Shire Council
Overlaps between councils	Analysis of overall catchment with focus on measuring the runoff entering one municipality from another. Banyule shares boundary at the Yarra River, but doesn't share the SBO				Turned down an opportunity to build a bike path bridge from Boroondara to other side of the Yarra River (location not known)	
l l	overlay (GAP)					
Gaps	Banyule and five other councils made case that planning should be more environmentally focused. Gap in state planning system for capturing environmentally sustainable buildings/development. Councils that subscribe to this thought are Moreland, Port Phillip, Yarra, Darebin and Banyule.	Council has a clear and comprehensive framework for managing residential growth as well protecting areas of environmental and landscape significance. It is considered that there are no significant policy gaps within the current framework.	 Connectivity gap - Alphington - Fairfield Boathouse - private land to the river bank Golf course in Fairfield Former Carlton United Breweries site 			The Nillumbik stretch of the Yarra River is impacted by upstream issues
	Some gaps in overlays from neighbouring councils (SBO overlay)					
	Council has no knowledge of future drainage plans for MW-managed catchments within Council municipality. Main Yarra Trail – who has					
	responsibility for it? Protection for lower flying birds.					
Issues	Floodplain management overlay L5 based on the 1934 flood event.	Concerned about impact of North East link on the Yarra River. Uncertainty about future impact of flooding. Reviewing rural conservation zone • Amenity related • No major changes expected	 Push on increase in population and activity centres, as well as push for improved environmental conditions of Yarra. Also concerns about climate change and getting information from MW regarding catchment modelling so that future planning schemes can be developed etc. Urban forestry Shortages in open space, particularly in the south of the municipality. 	Some private ownership extends to the Yarra River: • Vegetation removal • Inappropriate development • Private jetties	Boroondara Council's main focus at the moment is to control urban development across the whole municipality. Council is comfortable with the current management of the Yarra Corridor.	Concerned about farm dams overflowing and transporting sediment and other contaminants to waterways, including Diamond Creek. Council is currently looking into this issue, however it is seen as challenging, particularly regarding talking to landowners about the issue and deciding what can be done about it.
	• Is this still the current data?					
	 Climate change implications? Probable Maximum Flood not in planning scheme 					
	Some Councils lack detailed models of					
	implications of flooding on downstream municipalities.					
	Cost of WSUD, particularly when retrofitting into existing urban areas.					
Comments	David Cox had a lot of insight into the geological and environmental aspects of planning in the Banyule area. Felt that the residential planning code was ineffective.	Strong focus on protecting green wedge and open space.	Peter Mollison has a high level understanding of planning around the Yarra River.	Had a good understanding of the planning controls placed over the whole municipality, but not a high level of details for those specifically relating to the Yarra River or the environmental	River-based recreation Privately operated boat sheds Bike paths on parts of the river 	Seemed to be happy with the current planning controls in Nillumbik and didn't really have much comment on additional values or threats, except for the farm dam issue highlighted above.
	Noted scope to set targets for Yarra tributaries and corridors.			values within the municipality.		
	Want more focus on:					
	IWM/WSUD					
	Buildings and works plans					
	The Yarra River Keepers may have more detailed information about specific locations along the Yarra where there					
	are gaps.					



4. Conclusions

The review of YSP partner documents and discussions with representatives of six of the eight Councils whose municipality is adjacent to the Yarra River revealed that most organisations have identified similar values and threats in relation to the Yarra River and its tributaries:

Values

- Environmental, aesthetic, cultural and recreational values
- The special river corridor ambiance and aesthetic e.g. sense of seclusion
- Its role as a refuge for indigenous plants and animals
- The open space and recreation areas along the corridor
- Native trees and animals

Threats

- Subdivision and more intense development adjacent to the river corridor, including built form that is highly visible along the ridgeline or too close to the banks of the river, large areas of hard paved surfaces
- Vegetation removal e.g. significant indigenous vegetation, loss of mature canopy trees
- Loss of well-vegetated informal gardens which screen built form from the river corridor
- Immodest and excessive boating infrastructure
- Fencing and other infrastructure (e.g. stairs) along the river edge
- Backyard tennis courts, swimming pools and other built form that reduces space for planting and impacts on the naturalistic landform
- Stormwater and wastewater discharges as well as contaminant-laden overflows from farm dams
- Climate change

Most Councils identified the same broad goals e.g. protect/enhance the Yarra River, biodiversity and vegetation, improve community connection, although the particular priorities varied between Councils and their position along the urban gradient i.e. inner suburban, middle suburban, peri-urban. However, Council planning controls present a varying set of objectives, permit triggers and decision guidelines. The potential for this to lead to inconsistent outcomes, together with the need for stronger, consistent controls to protect the river banks and the vegetated buffer corridor along the river from inappropriate development, was generally acknowledged. Despite this, there does not appear to be consensus between State and local governments on which are the most appropriate planning controls to provide strength and consistency. The Middle Yarra Corridor Study (DELWP 2016b) suggests using a DDO in combination with an ESO or SLO and provides some guidance on when to use each of the latter two controls. Recent changes to the State Planning Policy Framework (SPPF) set clear objectives for preventing overshadowing, limiting building height, increasing setbacks, and riparian and canopy vegetation protection in the Yarra River corridor (DELWP 2016c). The expectation is that these standards will be applied through new DDOs and SLOs in local planning schemes with the view to support more consistent decision-making along the Yarra River corridor.

Gaps in planning controls

A number of gaps were identified during our discussions with Council staff. These can be summarised as follows:

- A number of Councils were of the view that there was insufficient weight assigned to the environmental aspects of planning, particularly at the State level and in relation to sustainable buildings and development.
- The use of different planning controls to protect values resulted in some gaps or varying degrees of protection given to values e.g. where an area of value crossed local government boundaries
- Councils may have limited knowledge of and no ability to influence future drainage plans for MWmanaged catchments that lie within their municipality.
- There were uncertainties about who is responsible for management of the Main Yarra Trail



- Land ownership can create challenges for connecting values e.g. private ownership of Alphington Fairfield Boathouse land to the river bank
- Section of waterways within each municipality are often impacted by land-uses upstream of the municipal boundary and this is challenging for each Council to manage

4.1 Recommendations

Based on the findings of our document review and interactions with Yarra River Councils, our recommendations for identifying and addressing threats and gaps in planning controls are as follows:

- There is a need to address inconsistencies in planning controls in order to provide consistent levels of protection for values and guidelines for decision-making, especially where values cross local government jurisdictions.
- Balancing the needs of local planning with those of the river corridor as a whole is challenging and requires careful consideration.
- Although land along the Yarra River Corridor is managed separately, it is a connected river system. Management actions implemented in one location therefore have the potential to deliver both local benefits and avoided costs to downstream waterways, such as reduced flooding, increased amenity and protection of biodiversity. It would therefore be useful to consider how resources might be pooled in instances where benefits are realised across multiple municipalities.
- Threats can be cumulative down the river corridor and this impacts the ability for Council to deal with problems that are the product of land-use(s) in a larger area than their immediate municipality. For example, it is unlikely that Councils will be able to manage the flow and water quality threats posed by urban runoff generated within their municipality as well as stormwater discharges from upstream urban areas.
- When consulting stakeholders, give some thought about who to engage within each organisation as this will influence the quality and extent of information that can be gathered. If an individual exists within an organisation that has worked for that organisation for a long time and across multiple divisions, it is possible that they will have sufficient corporate knowledge that consulting just that individual will yield deep insights. However, should no such individual exist, it would be preferable to consult with a number of staff that collectively represent all the relevant sections of that organisation.

Identifying key gaps and opportunities for future protection of areas of high environmental and landscape value



5. References

City of Yarra (2015) Yarra River Corridor Strategy, Volumes 1 & 2.

DELWP (2016a) Lower Yarra River Corridor Study: Recommendations Report.

DELWP (2016b) Middle Yarra River Corridor Study: Recommendations Report.

DELWP (2016c) Water for Victoria: Water Plan.

Manningham City Council (2011) Manningham Green Wedge Action Plan 2020.



Appendix A. Summary of partner document review

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